

ABSTRACT OF THE DISCLOSURE

A flat lamp for emitting light to a surface area includes a planar cover formed of a transparent material, an anode formed on a rear surface of the planar cover; the rear surface of the planar cover coated with a fluorescent material, a bottom coupled with the rear surface of the cover to form a sealed inner space between the bottom and the rear surface of the cover, a cathode formed on a surface of the bottom internal to the sealed inner space, power supply means electrically connected to the anode and the cathode to supply an external power source, and a plasma-discharging gas injected into the sealed inner space, wherein visible light is produced uniformly over an entire surface of the cover by a reaction between the plasma-discharging gas and an electric field generated between the cathode and the anode.